

Applicant's amendment dated September 16, 2009, has been fully considered.

Applicant argued the applied references do not teach the natural frequency of the float substantially resonance with the frequency of a sea wave. Even though the Examiner disagrees because it's unclear what frequency of the sea wave is recited in the independent claims, a new ground of rejection has been made based on newly discovered references.

Claims 1-7, 9-28, are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

The phrase "a natural frequency of vertical oscillation which is substantially resonant with the frequency of a sea wave" is vague and indefinite because it's unclear which sea wave is recited. All sea waves have a frequency, and all floats have a natural frequency. Therefore, the natural frequency of the float must be resonant of some sea waves.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent

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granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-3, 5, 10, 18, 23, 24, 27, 28, are rejected under 35 U.S.C. 102(e) as being anticipated by US 6857266 (Dick).

Dick discloses a wave power generating plant comprising floats 5, 6, a motor 34 with drive shaft for driving an alternator 35 for generating electricity; column 8, lines 5-68, disclose the concept that the floats has the natural frequency substantially resonant with the sea wave.

Claims 1-2, 5, 10, 18, 23, 24, are rejected under 35 U.S.C. 102(b) as being anticipated by US 4464578 (Masubuchi).

Masubuchi discloses a wave power generating plant comprising floats 1, an air turbine 11 with drive shaft for driving an alternator 12 for generating electricity; abstract, and column 3, lines 1-21, disclose the concept that the floats has the natural frequency substantially resonant with the sea wave.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-7, 9-28, are rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. 4319454 (Lucia) in view of US 5578889 (Epstein). Lucia discloses a wave power generating plant comprising floats 13, with counterweights, a structure with drive shaft 8, generator 18 for generating electricity, transmission with clutch and ratchet wheel 9. Lucia does not disclose the floats have the natural frequency substantially resonant with the sea wave. Epstein discloses a wave energy system with floats 10; in the abstract, figure 14, and column 8, lines 39-63, Epstein discloses the natural frequency can be adjusted to match the measured wave frequency. It would have been obvious to modify the system in Lucia to have the frequency control system in Epstein for the purpose of controlling the frequency to maximize the power output. Regarding claims 11-13, 19-20, 22, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the system in Lucia to be fitted with different wave lengths and frequencies for purpose of achieving appropriate power outputs.

Claims 1-7, 9-28, are rejected under 35 U.S.C. § 103(a) as being unpatentable over GB 2064665 (Salvatore) in view of US 6857266 (Dick). Salvatore discloses a wave power generating plant comprising floats 24, 34, with counterweights 14, a structure with drive shaft 13, generator for generating electricity, transmission with flywheels 15-17 discloses all the claimed subject matter as set forth above in the rejection of claim 1, but does not disclose different wave lengths and natural frequencies. Salvatore does not disclose the floats have the natural frequency

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substantially resonant with the sea wave. Dick discloses a wave power generating plant comprising floats 5, 6, a motor 34 with drive shaft for driving an alternator 35 for generating electricity; column 8, lines 5-68, disclose the concept that the floats has the natural frequency substantially resonant with the sea wave. It would have been obvious to modify the system in Salvatore to have the frequency control system in Dick for the purpose of controlling the frequency to maximize the power output. Regarding claims 11-13, 19-20, 22, it would have been obvious at the time the invention was made to a person having ordinary skill in the art to modify the system in Salvatore to be fitted with different wave lengths and frequencies for purpose of achieving appropriate power outputs.

Any inquiry concerning this communication or earlier communications from the Examiner should be directed to Examiner Nguyen whose telephone number is (571) 272-4861. The examiner can normally be reached on Tuesday--Friday from 12:30 AM to 10:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thomas E. Denion can be reached on 571-272-4859. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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11/2/2009

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